ADEQ

ARKANSAS
Department of Environmental Quality

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Return Receipt Requested

April 10, 2013

U.S. EPA Region 6
Attn: Mr. Stephen Tzhone
Mail Code: 6SF
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

RE: Site Inspection and Screening Risk Assessment for Dioxins/Furans
Arkwood, Inc. Site, Omaha, Arkansas
EPA ID# ARD084930148; AFIN# 05-00003
Dated December 17, 2012

Dear Mr. Tzhone:

The Arkansas Department of Environmental Quality - Hazardous Waste Division (ADEQ) has received the Site Inspection and Screening Risk Assessment for Dioxins/Furans for the Arkwood, Inc. Site, Omaha, Arkansas dated December 17, 2012. After reviewing the report ADEQ has the following comments:

1) **Ditch Sediment Sampling for Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/Fs) at the Arkwood, Inc. Site on September 24 and October 26, 2012, paragraph 4, page 5:** "Two samples were collected at the main Site, one at the base of the stormwater ditch (328 parts per trillion (ppt) toxicity equivalence (TEQ), sample 1) and a second sample on the adjacent natural berm (1,598 ppt TEQ, Sample 2)....". The source of the contamination in the berm sample is uncertain, but is suspected to relate to the former ash pile originally located within 20-30 feet upstream before its excavation." The ADEQ is concerned about the high PCDD/F TEQ value of the rocky natural berm when compared to the new soil dioxin preliminary remediation goal (PRG) for industrial use of 664 ppt TEQ. Please provide any additional information to alleviate this concern.

2) **Screening Risk Assessment for PCDD/Fs Based on Ditch Samples at the Arkwood, Inc. Site, paragraph 4, page 7:** "A ditch sediment contact frequency factor of 0.1 was applied to the Exposure Frequency parameter in order to adjust for the more limited likelihood of any person having soil contact in ditches and the berm.....". The report states that the exposure frequencies were multiplied by a frequency factor of 0.1 since the ditches and berms that contain the sampled sediment involve such a small portion of the site. ADEQ does not agree with the use of this frequency factor. These risk calculations should be revised without using this frequency factor. Exposure frequencies of 100 days/year for the industrial worker and 52 days/year for the trespasser should be used.

3) **Screening Risk Assessment for Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/Fs) Based on Ditch Samples at the Arkwood, Inc. Site, paragraph 6, page 8:** "Also, the ditch sediments represent environmental sink samples that are likely to considerably overstate the probable PCDD/F exposures to surface soils in general for both on-Site soils (which are fully vegetated and capped with 6 inches of clean soil)...." Please clarify the extent of the vegetated soil cap, and whether or not the cap coverage includes the railroad ditch area.

4) **General:** The report lacks clarity as to the purpose and scope of the study. Specifically, why was the study limited to sediment? The report should clarify the objective(s) and provide rationale for the scope. The rationale for considering the limited number of samples as representative of on- and off-site conditions should be included. An evaluation of potential future risk would be needed to evaluate re-use of the site.

If you have any concerns or questions, please contact me at 501-682-0852 or via e-mail moix@adeq.state.ar.us.

Sincerely,

Mark Moix

Mark Moix
Engineer, PE
Technical Branch
Hazardous Waste Division

cc: Ruben Moya, EPA Region 6
Carlos Sanchez, EPA Region 6